

eight. In the third, which commences behind the pectoral, and extends in like manner to the caudal, there are thirty-five. In the fourth, which commences on the breast, immediately behind the point of attachment of the branchial membrane to the isthmus, there are thirty, reckoning to behind the anal, where it unites with its fellow to form one; between this point and the caudal there are ten, the serratures of which are rather obsolete. The fourth pair of ridges are throughout their course less sharply serrated than the second and third pairs, and these last again rather less so than the first or dorsal pair. Between the two ventral ridges, near their commencement in front of the ventral fins, are six slightly serrated scales (similar to those in the ridges) forming on the breast a somewhat triangular patch, two single ones standing first, then four others in pairs. The lateral line, which is catenulated as in *A. cataphractus*, commences at the upper angle of the opercle, then bends downwards to take a middle course between the second and third ridges, which it preserves to the caudal. The first dorsal commences behind the seventh scale in the dorsal ridges, or at about one-third of the entire length; it is of the same form as in the *A. cataphractus*, but contains more rays; its membrane terminates at the fifteenth scale, and there are rather more than two scales between it and the second dorsal, which last is rather shorter and higher than the first. The rays of the first dorsal are not stouter than those of the second, nor relatively stouter than those of the *A. cataphractus*. The rays of the second dorsal are simple, with the second and third rather longer than the first. The anal answers to the second dorsal. The pectorals are rounded, and one-fifth of the entire length. Ventrals very narrow, and scarcely more than half the length of the pectorals. Position of the vent a little anterior to a line connecting the extremities of the ventrals.

COLOUR.—(*In spirits*.) Dusky grey above and on the sides, paler beneath; with four broad transverse blackish fasciæ passing across the back and down the sides as far as the third longitudinal ridge of scales. The first fascia is in the region of the first half of the first dorsal; the second at the commencement of the second dorsal; the third near the end of the second dorsal; the fourth half way between the end of the second dorsal and the caudal; and a little beyond this there is a faint trace of a fifth fascia. The body is a little mottled in places with spots of the same dark colour as the fasciæ, and the fins, with the exception of the ventrals, are of the same hue.

Habitat, Chiloe, (West coast of S. America).

The absence of vomerine teeth has been considered by Cuvier as one of the characters serving to distinguish *Aspidophorus* from *Cottus*; but as these teeth are very distinctly developed in the present species, we must rather dwell upon the large keeled sharp-pointed scales, which envelope the body in a kind of mail, and, as Dr. Richardson observes,* “give the *Aspidophori* a totally different aspect from the *Cotti*.” Indeed on equally strong grounds as those on which Cuvier has separated *Pinguipes* from *Percis* and *Prionotus* from *Trigla*, the present species, which possesses both vomerine and palatine teeth,† might be made a distinct

* Faun. Bor. Amer. Part Third, p. 49.

† Is it not possible that this may be found to be also the case with several of the foreign species described by Cuvier, in which the absence of these teeth has been rather presumed than ascertained from actual examination?

genus from *Aspidophorus*, or at least considered as one of its subgenera. But in the present uncertain state of our knowledge with respect to the exact value of this character,* and from the general resemblance of the *A. Chilensis* in all its principal characters to the other species of this genus,† I have not thought this step necessary.

This species was taken by Mr. Darwin at Chiloe. There are two specimens in the collection. The second differs from the one above described, only in having one ray less in the first dorsal, and two more carinated scales in each of the dorsal ridges. Independently of its having vomerine and palatine teeth as above noticed, this species will not enter into any of Cuvier's sections of the genus *Aspidophorus*, but combines in itself the characters of his first and third; the dorsals being separated by nearly three scales, the jaws being very nearly equal, the rays of the first dorsal not stouter than those of the second, and the throat being bearded.

PLATYCEPHALUS INOPS. Jen.

P. capite longo, lavi, ubique inermi, spinis duabus ad angulum preoperculi brevissimis æqualibus exceptis; oculis magnis, arcuè propinquantibus: dorso et lateribus fuscis; abdomine albido; pinnâ dorsali primâ liturâ magnâ irregulari nigro-fuscâ posticè maculatâ; dorsali secundâ, caudali, et pectoralibus, maculis fuscis parvis; anali et ventralibus ferè omnino nigricantibus.

B. 7; D. 8—12; A. 12; C. 13, &c.; P. 19; V. 1/5.

LONG. unc. 16.

FORM.—Head very much depressed, and rather longer than in most of the species of this genus; its length being nearly twice its own breadth, and nearly one-third of the entire length. Breadth of the body at the pectorals one-seventh of the entire length: depth at that point half the breadth. Snout rounded horizontally. Lower jaw longest. Gape reaching to beneath the

* Cuvier seems to have attached much value to the character of teeth on the palate; but I agree with Dr. Richardson, (*Faun. Bor. Am.* Part iii. p. 19.) in considering it “of little importance as a generic character in some families of fish.” And the author last mentioned notices an instance (exactly analogous to that of the *Aspidophorus Chilensis*) in the *Thymallus signifer*, which, he says, “resembles the common grayling very closely in its general form, but differs from it in having palatine teeth.”

† In its general characters it does not depart from the *A. cataphractus* of the British seas, anything like so much as the *A. quadricornis*, and *A. monopterygius* do.